

HHE UNITED STATES OF AMIERIOR

TO ALL TO WHOM THESE; PRESENTS; SHALL COME;

Gallatin Valley Seed Gompany

Colherens, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART Hereof, and the various requirements of ${
m LAW}$ in such cases made and provided have BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLI-CANT(S) FOR THE TERM OF SCUENTEEN YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY ${
m LAW}$, the right to ex-LUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT HETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT AT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA

'Sugar Snap'

In Lestimony Witherrot, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington

this 11th day of April in the year of our Lord one thousand nine

hundred and seventy-sever

FORM GR - 470 ,(12-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION HYATTSVILLE, MARYLAND 20782

FORM APPROVED OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.					
1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME		FOR OFFICIAL USE ONLY		
SUGAR SNAP	Snap Pea (a n	ew class)	7600062		
3. GENUS AND SPECIES NAME	4. FAMILY NAME (Bo	tanical)	FILING DATE	TIME C A.M.	
	Leguminosa	ie .	3.26.76	BALANCE DUE	
Pisum sativum L.	5. DATE OF DETERM		\$ 250.00	\$	
	1969		250.00	\$	
6. NAME OF APPLICANT(S)	7. ADDRESS (Street as	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)			
		P O Box 167		CODE AND NUMBER	
Gallatin Valley Seed Co.				(208)733-8222	
	Iwin raiis	Twin Falls, Idaho 83301			
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Comporation, partnership, association, etc.)		10. STATE OF INCORPORATION		11. DATE OF INCOR- PORATION	
Corporation Montana		Montana		9/28/22	
12. Name and mailing address of app	licant representative(s), if any, to serve i	in this application a	and receive all papers;	
13. CHECK BOX BELOW FOR EACH ATTA 13. CHECK BOX	reeding History of the escription of the Variet scription of the Variet ive of Novelty	y y	n 52 of the Plant V	ariety Protection Act.)	
14A. Does the applicant(s) specify the (See Section 83(a), (If "Yes,"	hat seed of this variety	be sold by variety	name only as a cla	iss of certified seed?	
14B. Does the applicant(s) specify t	•			erations of production	
limited as to number of generat		beyond breed		_	
	🗌 YES 🔀 NO	FOUNDATIO	N REGISTERE	D CERTIFIED	
The applicant declares that a viable ance of a certificate and will be re-	• -	-		-	
The undersigned applicant(s) of the uniform, and stable as required in Plant Variety Protection Act. Applicant is informed that false residuals and 8 1976 (DATE)	Section 41 and is enti	tled to protection u	inder the provisions	of Section 42 of the	
(DATE)	/	/ TSI	GNATURE OF APPLIC	^NTO0001	

INSTRUCTIONS

GENERAL: Send an original copy of the application exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.
- 13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.
- 13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

8. PODS		HT 2 = SLIGHTLY CURVED				
2	Shape: 3 = CURVE		ا کے ا	: 1 = POINTED (Alderman)	2 = BLUNT (Alaska)	
	~ .	GREEN (Alaska WR) 2 = MEDIUM (Specify)	GREEN :	3 = DARK GREEN (Alderman	n)	
	4 = UIHER	(ореспу)				
1	Surface: 1 = SMO	OTH 2 = ROUGH		ace: 1 = SHINY 2 =		
3	1 = SING 5 = DOU	SLE 2 = DOUBLE 3 = SING BLE & TRIPLE 6 = TRIPLE		BLE 4 = SINGLE, DOUB Specify)	BLE, & TRIPEE	
0	6 CM. LENGTH			WIDTH (Between sutures)	0 7 NO. SEEDS PER POD	
9. SEED	S (95100 Tenderomet	er):		-		
3	Color: 1 = L	IGHT GREEN 2 = GREEN 3 =	DARK GREE			
Seive:	NOT TESTE	D, BECAUSE THIS VA	RIETY I	TEDIBLE PODDI	ED	
SEEDS	(Dry, Mature):					
5	Shape: 1 = FLAT	TENED 2 = ANGULAR 3 =	OVAL 4	≖ ROUNDED	RECEIVED MAY 6 1976	
3	Surface: 1 = SMOC 3 = WRIN	OTH 2 = DIMPLED KLED	2 Sur	face: 1 = SHINY 2		
1	Color Pattern:	1 = MONOCOLOR 2 = MOTTLED	3 = STR	PED 4 = DOTTED	MA(9) (8) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	
5	5 Primery Color: 1 = CREAMY-WHITE 2 = CREAM & GREEN 3 = LIGHT GREEN 4 = MEDIUM GREEN 7 = YELLOW 8 = BROWN 9 = RED AMS, GRAIN DIV.					
5)	0 = GRAY 11 = BLACK			PVPO	
	Hilum Floor Color:	1 = WHITE 2 = TAN 3 = BLACK	1 Con	tyledon Color: 1 = GREEN	2 = YELLOW 3 = ORANGE	
2	2 GRAMS PER 100	SEEDS				
10. DIS	EASE: (0 = Not Tested	; 1 = Susceptible; 2 = Resistant)	 .			
2	FUSARIUM WILT I	Race I	0 NE	AR-WILT	DOWNY MILDEW	
0	ASCOCHYTA BLIGH	T ·	1 PO	WDERY MILDEW	0 BACTERIAL BLIGHT	
0	MOSAIC		O PE	A ENATION MOSAIC	O YELLOW BEAN MOSAIC	
	OTHER (Specify)					
11, INS	ECT: (O= Not Tested;	1 = Susceptible; 2 = Resistant)				
1	APHIDS		ТО	HER (Specify)		
12. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED						
	CHARACTER	NAME OF VARIETY		CHARACTER	NAME OF VARIETY	
	Leafiness	Mammoth Melting Sug		esh Seed Color	Hyalite	
<u> </u>	Leaf Color	Mammoth Melting Sug Hyalite		nture Seed Color	Hyalite R S 87 (drum shape)	
	Pod Color Pod Shape	RS 87 (Tight Pod)	I	ed Shape ant Habit	Mammoth Melting Suga	

COMMENTS:

FORM GR-470-14 (5-15-74)

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION HYATTSVILLE, MARYLAND 20782 OBJECTIVE DESCRIPTION OF VARIETY

PEA (PISUM SATIVUM)

NAME OF APPLICANT(S)	VARIETY NAME OR TEMPORARY DESIGNATION					
Gallatin Valley Seed Co						
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	SUGAR SNAP (H477-2) FOR OFFICIAL USE ONLY					
PO Box 167 Twin Falls, Idaho 83301						
	PVPO NUMBER 76 00062					
Place the appropriate number that describes the varietal character in the boxes below.						
Place a zero in first box (e.s. 0 8 9 or 0 9) when number is either 99 or less o	r A Of 1C24+					
1. TYPE:						
3 1-GARDEN 2-FIELD 3-EDIBLE-PODDED						
2. MATURITY:						
1 6 Node number of first bloom: 0 7 0 No. of days to processing	1 5 5 0 Heat Units					
No. of days Earlier than						
0 0 No. of days Later than	R 6 = AUSTRIAN WINTER					
3. PLANT HEIGHT:						
1 6 0 cm . High						
Cm. Shorter than						
4. VINE:						
1 = SLIM (Alaska) 3 = HEAVY (Alderman) Habit: 1 = DETERMINATE 2 = INDETERMINATE 2 Stockiness: 2 = MEDIUM (Thomas Laxton WR)						
2 8ranching: 1 ≈ NONE (Alaska) 2 - 1-2 BRANCHES (Little Marvel) 3 = MORE THAN 2 BRANCHES (Dwarf Gray Sugar						
1 Internodes: 1 = STRAIGHT 2 = ZIG ZAG 2 4 NUMBER OF NODES						
6. LEAFLETS:						
1 = LIGHT GREEN (Alaska WR) 2 = MED. GREEN (Thomas Laxton WR) 3 = DARK GREEN (Alderman) Color: 4 = OTHER (Specify)						
3 Wax: 1 - NONE 2 - LIGHT 3 - MEDIUM 4 - HEAVY 1 1 - NOT MARE	BLED 2 = MARBLED (Alaska)					
Number of leaflet pairs: 1 = NOT PAIRED 2 = ONE 3 = TWO 4 = THREE OR MORE						
6. STIPULES:	· ·					
2 1 = LACKING 2 = PRESENT 2 1 = NOT CLASS						
1 = NOT MARBLED 2 = MARBLED 3 Size (Compared with leaflets): 3 = LARGER 2 = SAME 3 = LARGER						
2 Color (Compared with leaflets): 1 = LIGHTER 2 = SAME 3 = DARKER						
7. FLOWER COLOR:						
2 VENATION 1 STANDARD 1 WING 1 KEEL $\begin{cases} 1 = W \\ 4 = PI \end{cases}$ 6 = 0	HITE 2 = GREENISH 3 = LAVENDER URPLE 5 = RED THER (Specify)					

50 S

Exhibit A 1

AN ACCOUNT OF ORIGIN AND DESCRIPTION OF OUR NEW VEGETABLE

"SNAP - PEAS"

During my first year with Gallatin Valley Seed Co., (1969), Dr. M.C. Parker then Research Director, explained to me his many research projects. Among these projects, was a plant breeding program to reduce parchment and strings in edible-pod peas. He had about abandoned the project because the pods with less parchment or strings were more distorted in shape and therefore less desirable.

Dr. Parker later showed to me a mutant rogue found in peas, called a "tight-pod". I examined this rogue to learn why the pods were "tight". I was surprised to find that its pod walls were about twice as thick as other peas. The thought then came to me, if the pod walls of edible-pod peas were twice as thick, perhaps, they would not become distorted when the parchment and strings were reduced.

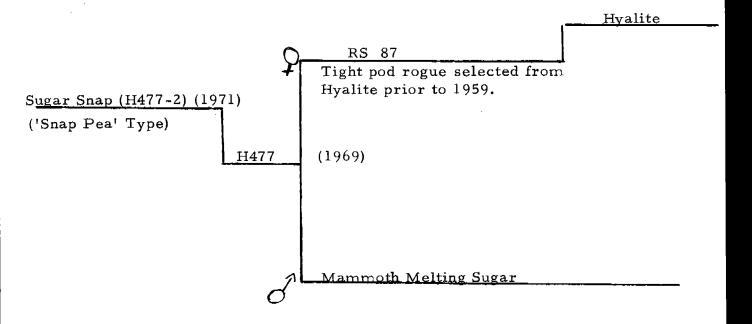
This tight-podded rogue also had good quality shelled peas; whereas, the standard edible - pod peas have very objectionable flavors once the seeds start to develop. It appeared feasible that a cross between this rogue and a standard edible-pod pea might produce a thick-pod without distortion and having good quality shelled peas.

The fall of 1969, I made hand pollinated crosses between Mammoth Melting Sugar (a standard edible pod variety) and RS 87 (a tight podded rogue selected from Hyalite).

Subsequent generations were grown in the green house and field. In 1971, single plant selections were made. Later H477-2 was chosen as the best line, and now has been named, "Sugar Snap". As of fall 1975, we had increased the seed of Sugar Snap to 3,400 pounds.



Pedigree Chart For Sugar Snap



Data complied from breeding records of Gallatin Valley Seed Co.



Exhibit B

Botanical Description of Sugar Snap

Sugar Snap is a new class of peas which is different enough from the standard edible-pods and shelled peas to be considered a new vegetable. It has thick, crisp pod walls without parchment. The pods are tight and free from distortion. When a pod is bent, it will snap like a fresh snap bean pod; hence, we are calling this new class, "snap-peas". These peas can be used as a multipurpose vegetable. The pods and peas together are exceptional. The peas can be shelled out and used alone. One pod wall is as thick or thicker than the whole standard edible-pod. These pod walls become the center of attraction in a green salad. They also can be cooked like standard edible-pods.

Our Sugar Snap can be used from the slab-pod stage up to where the pod starts to become netted. Most people prefer the pods which have well developed peas in them.

The fexture and flavor of these pods have turned out even better than what we had anticipated. The crisp but tender pods are juicy and a delight to chew. The pod wall is sweeter and has a more enjoyable flavor than the standard edible-pods. The peas have a flavor similar to good quality shelled peas, which is quite different from the pod wall. As one chews these pods, he may detect the flavor of the pod wall, or the peas, or perhaps a changing combination of the two flavors.

The pods of Sugar Snap are very good either fresh or cooked. The are very suited for freezing, but not for canning. A good way to cook them is to "stir-fry" them in hot oil just long enough for the pods to change to a darker green in color. If they are over-cooked, the pod wall and peas taste more near the same and some of the uniquness of different flavors are lost.

In a once over harvest, as is done in a commercial operation, a considerable increase in yield of usable product would be expected. The pod walls surrounding the standard sized peas more than equals the volume of the shelled peas. The slab pods which are not recovered in a normal operation can also equal the volume of the shelled peas. These peas would therefore about triple the yield of useable product over standard peas.



Exhibit D

Data Indicative of Novelty

Sugar Snap is most similar to its parent Mammoth Melting Sugar in vine type. It has long internodes with a tall indeterminate vine. Both varieties are free of parchment in their pod walls, but develop strings along the sutures of their pods.

Sugar Snap differs from Mammoth Melting Sugar in that the cotyledons are green and wrinkled as compared to yellow and smooth.

Sugar Snap also differs from Mammoth Melting Sugar and all other current varieties in that it has thick pod walls.



Statement of Basis of Applicant's Ownership

The undersigned specifies that Gallatin Valley Seed Co., applicant is the employer of the breeder responsible for the development of the subject plant variety of this application, namely Sugar Snap, (a new class of edible pod peas).

GALLATIN VALLEY SEED CO

(per)

Calvin R. Lamborn

(Title) Research Director

(Date) <u>March 8, 1976</u>

Exhibit E

b



TERRA-VIG 717 Ju Vanity Semmes.
TERRA-VIG 616 June Vanity Pickett. ARKANSAS Embred are served Applicates Forms and served System Toghter C Forms to be used with Judice applications. We meet of prove, We ruld like to have additional information of the subject revelves. Send Eyhte A, B, C Tela in Sup Peas. To so FUERE SMAP 760062 Jack Donavon 1 214 - 886 - 2872 1400 CULVER ST. COMMERSE, TEXAS 75428 SNAPPY 8500128 SUPER SUGAR MEL 8300165 STAINCLESS SUBAR 8300164 SNAT SUGAR VAPPY 8306163 SWEET SNAP 8200147 SUGAR PAE 8100112 SUBAR MEL 8100122 Sutar for

Harturg:

MISS. A.E.S.